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Total Number of Pages in This Submission

Application Number 10/825,523

Filing Date APRIL 15, 2004

First Named Inventor HEIMANN

Art Unit 1751

Examiner Name UNKNOWN

Attorney Docket Number EL025RH-2

ENCLOSURES (Check all that apply)

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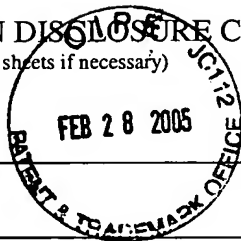
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Docket Number (Optional)

EL025RH-2

Application Number 10/825,523

Applicant(s)

Heimann et al. - Elisha Holding LLC

Filing Date

4/15/04

Group Art Unit

1751

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		1,129,329 A	2/1915	Vail et al.			
		1,289,215 A	12/1918	MacGahan			
		1,366,305 A	1/1921	Whyte			
		1,540,766 A	6/1925	Daniels et al.			
		1,744,116 A	1/1930	Hannen et al.			
		1,844,670 A	2/1932	Manson			
		1,909,365 A	5/1993	Knabner			
		1,912,175 A	5/1933	Blough et al.			
		1,946,146 A	2/1934	Kiefer et al.			
		2,462,763 A	2/1949	Nightinghall			
		2,475,330 A	7/1949	Nightinghall			

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
		DE 26 40 419	3/1977					
		EP 9 945 017	7/1981					
		EP 0 087 288	2/1983					
		EP 0 492 306 A2	12/1991					
		EP 0 716 163 B1	11/1995					

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		S/N 09/775,072
		S/N 09/816,879

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Group Art Unit

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		2,495,457 A	1/1950	Jacobs			
		2,512,563 A	6/1950	De Long			
		2,539,455 A	1/1951	Mazia			
		2,641,556 A	6/1953	Robinson			
		2,780,591 A	2/1957	Frey			
		2,855,328 A	10/1958	Long			
		3,224,927 A	12/1965	Brown et al.			
		3,301,701 A	1/1967	Baker et al.			
		3,444,007 A	5/1969	Maurer et al.			
		3,515,600 A	6/1970	Jones et al.			
		3,658,662 A	4/1972	Casson, Jr. et al.			

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
		EP 0 716 163 A1	11/1995					
		EP 0 808 883 A2	5/1997					
		EP 0985743 A1	3/2000					
		GB 498485	2/1939					
		EP 53060937	5/1978					

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		S/N 09/755,072
		S/N 09.814,641

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Group Art Unit

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		3,663,277 A	5/1972	Koepp et al			
		3,687,740 A	8/1972	Pearlstein et al.			
		3,796,608 A	3/1974	Pearlman			
		3,839,256A	10/1974	Parkinson			
		3,920,468 A	11/1975	Brown, et al.			
		3,993,548 A	11/1976	Creutz et al.			
		4,059,658 A	11/1997	Shoup et al.			
		4,082,626 A	4/1978	Hradcovsky			
		4,101,692 A	7/1978	Lomasney et al.			
		4,105,511 A	8/1978	Nikaido et al.			
		4,150,191 A	4/1979	Karki			

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
		JP 55091997	11/1980					
		JP 61057654	3/1986					
		JP 6016460	8/1987					
		JP 1149980	6/1989					
		JP 1240674	9./1989					

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		S/N 10,211,029
		S/N 10/311,051

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Group Art Unit

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		4,166,777 A	9/1979	Casson, Jr. et al.			
		4,169,916 A	10/1979	Tsutsui et al.			
		4,184,926 A	1/1980	Kozak			
		4,193,851 A	3/1980	Crawford et al.			
		4,222,779 A	9/1980	Bengali et al.			
		4,240,838 A	12/1980	Blasko et al.			
		4,288,252 A	9/1981	Neely			
		4,351,883 A	9/1982	Marcantonio et al.			
		4,367,099 A	1/1983	Lash et al.			
		4,412,863 A	11/1983	Neely, Jr.			
		4,425,166 A	1/1984	Pavlik et al.			

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
		JP 1240674	9/1989					
		JP 2125884	5/1990					
		JP 3221275	9/1991					
		JP 3260095	11/1991					
		JP 5-195252	1/1992					

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		S/N 10/211,094
		Electrodeposition & Characterization of a Corrosion Resistant Zinc-Nickel-Phosphorus Alloy, By A. Krishniyer, M. Ramasubramanian, B.N. Popov & R. H. White Jan 1999

EXAMINER

DATE CONSIDERED

INFORMATION DISCLOSURE CITATION .

(Use several sheets if necessary)

Docket Number (Optional)

Application Number

Applicant(s)

Filing Date

Group Art Unit

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		4,427,499 A	1/1984	Hitomi et al.			
		4,478,905 A	10/1984	Neely, Jr.			
		4,599,371 A	7/1986	Loch et al.			
		4,620,904 A	11/1986	Kozak			
		4,645,790 A	2/1987	Frey et al.			
		4,705,576 A	11/1987	Klos et al.			
		4,756,805 A	7/1988	Terada et al.			
		4,786,336 A	11/1988	Schoener et al.			
		4,921,552 A	5/1990	Sander et al.			
		4,992,116 A	2/1991	Hallman			
		5,068,134 A	11/1991	Cole et al.			

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
		JP 5-255889	3/1992					
		JP 5-287585	4/1992					
		JP 4301096	10/1992					
		JP 5070974	3/1993					
		JP 5125553	5/1993					

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Ellipsometric and Ram, a Spectroscopic Study of Thermally Formed Films on Titanium, P. Hristova and Li Asov., B.N. Popov and R. H. White, Electrochem Soc., vol. 144, No. 7, Jul. 1997 / The Electrochemical Society, Inc.
		Galvanostatic Pulse and Pulse Reverse Plating of Zinc-Nickel Alloys from Sulfate Electrolytics on a Rotating Disc Electrode - B.N. Popov, M. Ramasubramanian, S.N. Popova, R.B. White and K-M Yin J. Chem Soc., Faraday Trans. vol. 92 (4021-4027), 1996. No month avail.

EXAMINER

DATE CONSIDERED

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Document Number (Optional)

Application Number

Applicant(s)

Filing Date

Group Art Unit

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5,108,793 A	4/1992	van Oij et al.			
		5,221,371 A	6/1993	Miller			
		5,223,106 A	6/1993	Gerace et al.			
		5,275,703 A	1/1994	Shih et al.			
		5,275,713 A	1/1994	Hradcovaky			
		5,283,131 A	2/1994	Mori et al.			
		5,338,434 A	8/1994	Ruhl et al.			
		5,342,456 A	8/1994	Dolan			
		5,346,598 A	9/1994	Riffe et al.			
		5,352,342 A	10/1994	Riffe			
		5,368,655 A	11/1994	Klos			

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
		JP 5140761	6/1993					
		JP 5195252	8/1993					
		JP 5255889	10/1993					
		JP 5279869	10/1993					
		JP 5287585	11/1993					

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Gakavanostatic Pulse and Pulse Reverse Plating of Nickel-Iron Alloys from Electolytics Containing Organic Compounds on a Rotating Disk Electrode - B. N. Popov, Ken-Ming Yin, and E. White, J Electrochem Soc. 140(5), May 1993.
--	--	--

Silicate Species in High PH Solution Molybdate, Whose Silica Concentration is Determined by Coloiometry - Miho Tanakaa, Kazuya Takahashib The Tokyo Univ. of Fisheries, Konan, Minato-ku, Tokyo 1088477, Japan, The Institute of Physical and Chemical Research (RIKEN), Hirosawa, Viako, Saitama 3510198, Japan, Oct. 2, 2000, Oct. 30, 2000, Analytica Chimica Acta pp. 117-123

EXAMINER

DATE CONSIDERED

INFORMATION DISCLOSURE CITATION.

(Use several sheets if necessary)

Docket Number (Optional)

Application Number

Applicant(s)

Filing Date

Group Art Unit

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5,380,374 A	1/1995	Tomlinson			
		5,433,076 A	7/1995	van Ooij et al.			
		5,478,451 A	12/1995	Riffe			
		5,478,655 A	12/1995	Sabata et al.			
		5,489,373 A	2/1996	Parthasarathi			
		5,498,284 A	3/1996	Neely, Jr.			
		5,603,818 A	2/1997	Brent et al.			
		5,616,229 A	4/1997	Samsonov et al.			
		5,653,823 A	8/1997	McMillen et al.			
		5,658,697 A	8/1997	Lin			
		5,660,707 A	8/1997	Shastry et al.			

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
		JP 7-179949	12/1993					
		JP 7179949	7/1995					
		JP 10310722	11/1998					
		JP 11209891	8/1999					
		RU 2063486	10/1996					

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Silicon 29 NMR Studies of Aqueous Silicate Solutions, 2. Transverse 239 Si Relaxa and the Kinetics and Mechanism ofSilicate Polymerization, Stephen D. Kinrde and Thomas W. Swaddle, Nov. 25, 1987, Inorg. Chem. 1988, 27.4259-4264, Po. 4259-4264.
		Soaking Up Rays - A primitive marine creature has nat ural glass fibers that hint at high tech - Peter Weiss (Silica Skeletons) - Aug. 4, 2001, Science News,vol. 160, pp. 77-79.

EXAMIN ER

DATE CONSIDERED

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

Application Number

Applicant(s)

Filing Date

Group Art Unit

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5,660,709 A	8/1997	Bauer et al.			
		5,672,390 A	9/1997	Crews, IV et al.			
		5,674,371 A	10/1997	Patel			
		5,674,790 A	10/1997	Araujo			
		5,681,378 A	10/1997	Kerheve			
		5,681,658 A	10/1997	Anderson et al.			
		5,683,522 A	11/1997	Joesten			
		5,683,567 A	11/1997	Shimamune et al.			
		5,683,568 A	11/1997	Harris et al.			
		5,683,751 A	11/1997	Derule et al.			
		5,743,953 A	4/1998	Twardowska et al.			

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
		WO 94/18362	8/1994					
		WO 9703231	1/1997					
		WO 97/40208	10/1997					
		WO 98/33856	8/1998					
		WO 98/33960	8/1998					

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

A cathodically deposit ed mineral coating for replacement of Cr (VI) and Cr (iii) treatments of Zinc - Nancy Heimann, at AESF/EPA Conference, Feb. 1, 2001.

Development and commercialization of non-chrome electrolytic surface treatment for metallic surfaces - Wayne L. Soucie, Nancy G. Heimann, Robert L. Heimann, Information Exchange Seven Spa R esoprt, Champion, PA, Sep. 26, 2000.

INFORMATION DISCLOSURE CITATION.

(Use several sheets if necessary)

Docket Number (Optional)

Application Number

Applicant(s)

Filing Date

Group Art Unit

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5,750,085 A	5/1998	Yamada, et al.			
		5,750,188	5/1998	Menu			
		5,766,564 A	6/1998	Tijburg et al.			
		5,807,428 A	9/1998	Bose et al.			
		5,824,366 A	10/1998	Bose et al.			
		5,868,819 A	2/1999	Guhd et al.			
		5,871,668 A	2/1999	Heimann et al.			
		5,876,517 A	3/1999	Jeannier			
		5,900,136 A	5/1999	Gotsu et al.			
		5,906,971 A	5/1999	Lark			
		5,916,516 A	6/1999	Kolb			

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
		WO 99/31303	6/1999					
		WO 01/12883	2/2001					
		WO 01/71067	9/20091					

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Tery L. Barr, No date.
		Zero chrome electrolytic surface treatment for metallic surfaces -- Part I -- Bob Heimann, Bill Dalton & Wayee Soucie, Dr. Ravi Chandran, No date.

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INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)				Docket Number (Optional)		Application Number	
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				Filing Date		Group Art Unit	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		6,083,362 A	7/2000	Hryn et al.			
		6,083,374 A	7/2000	Kopp			
		6,149,794 A	11/2000	Heimann et al.			
		6,153,080 A	11/2000	Heimann et al.			
		6,258,243 B1	7/2001	Heimann, et al.			
		6,322,687 B1	11/2001	Heimann et al.			
FOREIGN PATENT DOCUMENTS							
	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	<u>Translation</u> YES NO
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
		B. Cabot, A. Foissy - Reversal surface charge of a mineral powder, application to electrophoretic deposition of silica for anticorrosion coatings - Journal of Materials Science 33 (1998) 3945-3952. No month.					
		A. B. Chnel - Effect of Zn ²⁺ - on the Correlation Radius in the Na ₂ O-ZnO-SiO ₂ System Inorganic Materials vol. 32. Nov 3, 1996, pp. 321-322 No month.					

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		3,658,662		Cesson, Jr. et al.			
		4,460,630	7/1984	Neshino et al.			
		4,492,616					
		4,462,842	7/31/84	Uchiyama et al.			
		5,091,224	2/1992	Kushida et a./			
		5,202,422 A	4/1993	Hiatt et al.			
		5,352,342	10/4/94	Riffe			
		5,433,976					
		5,455,080					
		5,478,655					
		5,498,481					

FOREIGN PATENT DOCUMENTS

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EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5,451,436					
		5,539,031					
		5,585,109 A	12/1996	Hayward et al.			
		5,352,296					
		5,700,523					
		5,750,197					
		5,759,629					
		5,871,668	2/1999	Heimann, et al.			
		5,902,415					
		6,057,382					
		6,096,650					

FOREIGN PATENT DOCUMENTS

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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		6,083,362 A	7/2000	Tayon et al.			
		6,083,374 A	7/2000	Kopp			
		6,149,794 A	11/2000	Heimann et al.			
		6,153,080 A	11/2000	Heimann et al.			
		6,174,932					
		6,258,243 B1	7/2001	Heimann et al.			
		6,322,687 B1	11/2001	Heimann et al.			
		6,455,100	9/2002	Heimann, et al.			
		US-2003/0118861	6/2003	Heimann et al.			
		60/354,565	2/5/02	Heimann et al.			
		09/814,641	3/22/01				

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
		UK 498,485		United Kingdom				
		9311562		German				
		00536832 EP B1		European				
		WO 01/71067 A2	9/27/01	International				
		WO 03/012167 A2	2/13/03	International				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		ASM Vol. 5, Surface Engineering 1994
		Silicate as Cleaners in the Production of Tinplate, L.J. Brown, 2/66, Plating

EXAMINER

DATE CONSIDERED

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		10/211,094	8/2/02				
		10/211,029	8/2/02				
		10/359,402	2/5/03	Heimann, et al.U			

FOREIGN PATENT DOCUMENTS

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		International Search Report

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		Ing. J. Kohnen - Long Life Corrosion Protection with Unorganic Silicates Verfahrenstechnik (Mainz), 1968; 2(5):217-20 No Month.	Zinc
		Hogrefe, Andre Rene; Czank, Michael - Synthetic dipotassium zinc disilicate - Mineralogisches Inst., Univ. Kiel, Kiel, Germany, Acta Crystallogr., Sect. C: Cryst. Struct. Commun (1995), C51(9), 1728-30. CODEN: ACSCEE ISSN: 0108-2701 Journal written in English. CAN 123:271293 AN 1995:840577 CAPLUS No month.	
		Kharitonov, Yu, Ya; Khomutov, N.E. and Akol'zin, A.P. (Mosk. Khim-Tekhnol. Inst., Moscow, USSR - Study of the reaction of iron hydroxides and oxides with sodium silicate and silicate acid solutions. Zashch. Met. 1978; 14(1):89-90, CODEN:ZAMEA9; ISSN: 0044-1856 No month.	
		Pretreatment and Surface Preparation, Ande, K. Matsushima, Y. Journal Name: Bosie Kanri (Rust Prev. Control) 31. (7) - July 1987, pp. 214-221. ISSN - 0520-6340. Language Japanese and English translation.	
		Anomalous Codeposition of Fe-Ni Alloys and Fe-NI-SiO ₂ Composites under Potentiostatic Conditions - Experimental Study and Mathematical Model - M. Ramasubramanian, S.N. Popov, and R.E.	
		White - J. Electrochem Soc., vol. 143, No. 2, Jul. 1996. The Electrochemical Society, Inc.	
		ASM Handbook, 1994, pp. 4, 7, 8 and 10. No month avail. Brown et al. - Silicates as Cleaners in the Production of Tin Plate II, Influence of Batch Anneal, Plating. Oct. 1971.	

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		Characterization of Hydrogen Permeation through Zinc-Nickel Alloys under Corroding Conditions: Mathematical Model and Experimental Study - M. Ramansubra - manian. B.N. Popov, and R.E. White - J. Electrochem. Soc., vol. 145, No. 6, Jun. 1998.	
		Characterization of Hydrogen Permeation Through a Corrosion-Resistant Zinc-Nickel-Phosphorous Alloy, A. Durairajan, A. Krishniyer, B.S. Haran, R.E. White, and B.N. Popov-Corrosion-vol. 56, No. 3, Mar. 2000.	
		Development of a New Electrodeposition Process for Plating of Zn-Ni-X (X=Cd,P) Alloys -- I. Corrosion Characteristics of Zn-Ni-Cd Ternary Alloys - Anand Durairajar Bala S. Haran, Ralph E. White and Branko N. Popov - Journal of the Electrochemical Society, 147 (5) S-2 Proof pp. (2000). No month avail.	
		Development of a New Electrodeposition Process for Plating of Zn-Ni-X (X=Cd, P), Alloys, Permeation Characteristics of Zn-Ni-Cd Ternary Alloys - A. Durairajan, B.S. Haran, R.E. White, B.N. Popov - Hournal of the Electrochemical Society, 147 (2) S-2 (2000) No month avail.	
		ISFEC 92 Conference, Sep. 1992 Watson, et al. - The Electrodeposition of Zinc Chromium Alloys and the Formation of Conversion Coatings Without Use of Chromate Solutions.	
		Mass transport effects on the electrodepositon of iron nickel alloys at the presence of additives - K.M. Yin, J.H. Wei, J.R. Fu, B.N. Popov, S.N. Popova, R.E. White - Journal of Applied Electrochemnistry 25 (1995) 543-555. No month avail.	
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		The Chemistry of Silica - Solubility, Polymerization, Colloid and Surface Properties, and Biochemistry - Ralph K. Iller - John Wiley & Sons - Copyright 1979, pp. 83-85, 161-163. No month avail.	
		Soluble Silicates Their Properties and Uses - vol. 2: Technology - James C. Vail, D Sc - Copyright 1952 1952, pp. 152, 231, and 284. No month avail.	
		Use of Underpotential Deposition of Zinc to Mitigate Hydrogen Absorption into Monel K500 - G. Zheng, B.N. Popov, and R.E. White, Journal Electrochem. Soc. 141(5), May 1994.	
		The Depolymerization of Silica in Sodium Hydroxide Solutions - S.A. Greenberg Laboratory for Physical and Inorganic Chemistry, Leiden, Holland. Mar. 11, 1957 vol. 61 pp. 960-965.	
		Effect of pH on Polymerization of Silicic Acid - Katsumi Goto, Faculty of Engineering, Hokkaido University, Sappor. Japan - Mar. 13, 1956 Jul. 1956, pp. 1007-1008.	
		Effects of Amide Additives on Polymerization of Silica Under Acidic Conditions - Tatsuro Horiuchi, Government Industrial Research Institute, Nagoya, 1-1, Hirat e-cho, Kita-ku, Nagoya 462 Japan - May 11, 1991, revised received Feb. 5, 1992 -Journal of Non-Crystalline Solids.	
		Kinetics of Silica Polymerization and Deposition from Dilute Solutions between 5 and 180 degree C - H.P. Rothbaum and A.G. Rohde, Chemistry Division, Dept. of Scientific and Industrial Research, Lower Hutt, New Zealand, Dec. 13, 1978, accepted Jan. 25, 1979 - Journal of Colloid and Interface Science, vol. 71, No. 3, Oct. 1, 1979, pp. 533-559.	

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		The Polymerization of Monosilicic Acid - G.B. Alexander - Oct. 7, 1953 Grasselli Chemicals Dept., Experimental Station, E.I. DuPont de Nemours & Co., Inc. po 2004-2096, vol. 76.	
		The Polymerization of Silicic Acid - Sidney A. Greenberg and David Sinclair, Johns-Manville Research Center, Manville, N.J. Nov. 20, 1954, May 1955, pp. 435-440.	
		Polymerization of Polysilicic Acid Derived from 3.3 Ratio Sodium Silicate R.K. Iler-Grasselli Chemicals Dept., Experimental Station, E.I. DuPont de Nemours and Company, Inc. Jan. 22, 1953, vol. 57, pp. 604-607.	
		The Preparation of Monosilicic Acid --G.B. Alexander - Jan. 16, 1953, Jun. 20, 1953, pp. 2887-2888.	
		The Reaction of Low Molecular Weight Silicic Acids with Molybdic Acid, G.B. Alexander, Jun. 11, 1953, pp 5655-5657.	

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